



Amendment to SS-WSI: C123-JUL-T1-TPL- CR094_SH005_Z-00001– Stepney Green Shaft

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| 3.0 | 13-04-2012 | [REDACTED] | [REDACTED] | [REDACTED] | Added GWB,C122 works and trial pit investigation at City Farm |

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| 1.0 | 06-09-2011 | [REDACTED] | [REDACTED] | [REDACTED] | Clarification of general watching brief requirement to include main works shaft excavation |
| 2.0 | 20-01-2012 | [REDACTED] | [REDACTED] | [REDACTED] | Added GWB and trial pit investigation at City Farm |
| 3.0 | 13-04-2012 | [REDACTED] | [REDACTED] | [REDACTED] | Added C122 instrumentation & monitoring St Dunstans |
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1 Introduction

The purpose of this amendment is to provide an update to section 5.4 of the Site-Specific WSI for Stepney Green document reference: [C123-JUL-T1-TPL-CR094_SH005_Z-00001](#) Rev 4.

Following the completion of archaeological excavation works at the site, further archaeological general watching brief (GWB) is required on the bulk excavation works in the shaft to be carried out by C305.

In addition a general watching brief and targeted watching brief (TWB) shall be undertaken on works associated with construction of two new facility buildings at Stepney City farm.

A further general watching brief is required on Instrumentation & Monitoring (I&M) designed by C122 in the area of St Dunstons Church former burial ground.

This amendment is relevant to the Principal Contractor (C305) and the Archaeological Contractor (C261).

2 Updated Scope

The results of archaeological excavation in the central and northern section of the shaft footprint identified the survival of significant archaeological deposits relating to a moated mansion, recorded under various names including King John's Court, King John's Palace and Worcester House. No further archaeological investigation is required where archaeological excavation has already taken place.

2.1 General watching brief – Bulk excavation of the shaft

A 16th century red brick wall that forms the boundary of the historic site is anticipated to extend into the southern part of the shaft footprint and a watching brief is required to identify this feature and make a record of it.

The area for the watching brief is the southern area of the shaft footprint (the red shaded area in Figure 1 below).

Bulk excavation within the shaft by the *C305 Principal Contractor* (Dragados-Sisk JV) shall take place under archaeological observation (general watching brief) by the *C261 Archaeology Contractor* (MOLA). The remains are expected to be identified at or around a depth of 107.4m ATD.

Refer to section 5.5 of the Site-Specific WSI for general attendances required from the *C305 Principal Contractor*.

Refer to section 5.6 of the Site-Specific WSI for the specification for the *C261 Archaeological Contractor*.

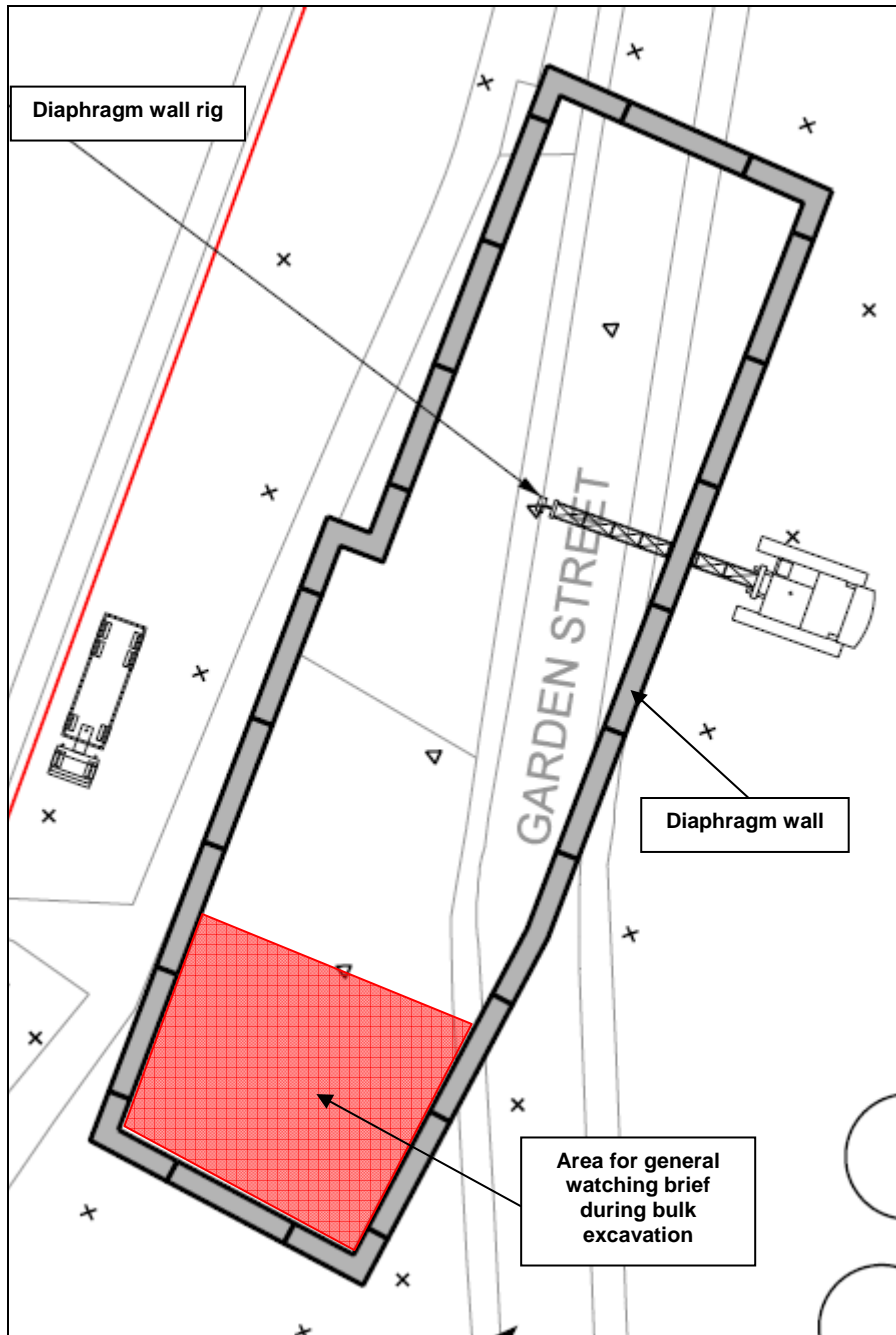


Figure 1 Area of bulk excavation to be carried out under general watching brief

2.2 General watching brief – Thames Water Stepney Green Ventilation Shaft-Fire Main

A general watching brief shall be undertaken by C261 on excavation works to lay a new fire main from the Crossrail shaft at Stepney Green along Ben Johnson Road.

The scope of works consists of:

- Install 385m of 315mm Outside Diameter (OD) barrier Polyethylene (PE) distribution pipe acting as a fire main from the connection to the trunk main at its eastern end, along

Ben Jonson Road and Stepney Green, then down Garden Street to a fire hydrant adjacent to the ventilation shaft.

- At the eastern end of the 315mm fire main, install a connection to the existing 15 inch (381mm) Cast Iron (CI) trunk main at the junction of Ben Jonson Road and White Horse Road, together with a sluice valve, washout and district metre.
- At the junction of Ben Jonson Road, Stepney High Street, Stepney Green and White Horse Lane, install 5m of 250mm OD PE distribution pipe as a cross-connection between the 315mm fire main and an existing 7 inch cast iron distribution main, together with a sluice valve, a washout and a sluice valve on the cross-connection pipe.
- At the western end of the 315mm fire main, provision of an air valve, a tee with a sluice valve and a blank flange for the temporary construction supply and a permanent fire hydrant at the ventilation shaft in Garden Street.
- The planned fire main is to be laid at 900mm depth. There are a couple of locations where it has to dip below the existing sewer.

For details and drawings see Thames Water Environmental Design Statement – PCN75A Stepney Green Ventilation Shaft-Fire Main Report No: 081-TW-RT-99-01 PCN75A Stepney Green Ventilation Shaft Fire Main- /23092011/04.

2.3 General watching brief –Stepney City Farm

A general watching brief shall be undertaken by C261 on excavation works to construct two new facility buildings at Stepney City Farm.

Excavation undertaken in 1979 (Figure 2) for LBTH prior to creation of the farm revealed the top of archaeological deposits surviving at c. 8.47mOD (Mills,P 1982, *Excavations at Stepney High Street E1*, London and Middlesex Archaeological Society Transactions Volume 33, p324-330).

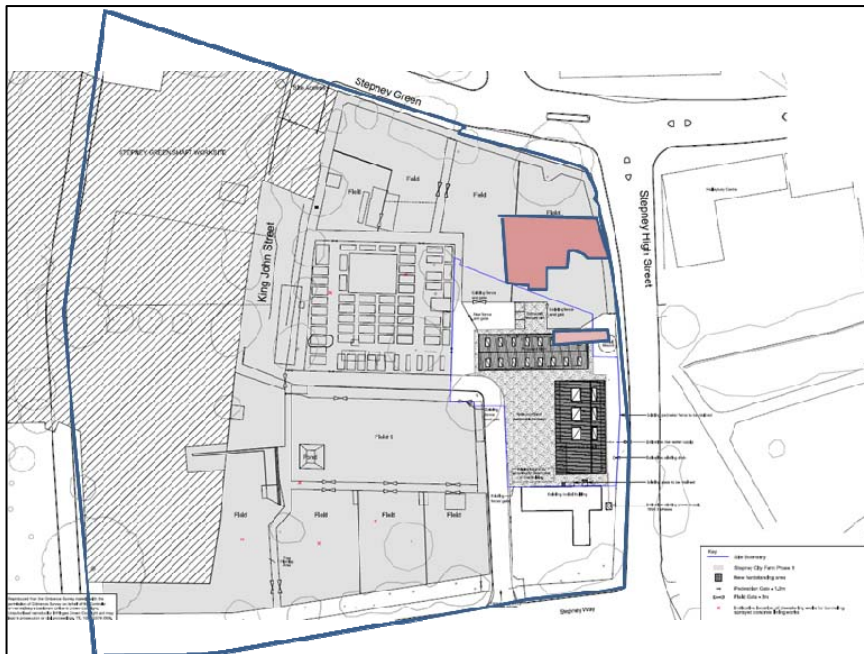


Figure 2 Areas of previous excavation (Pink) by Peter Mills in 1979 overlaid on location of proposed buildings

Average current ground level is 110.84m ATD in the area (see Sutcliffe Construction drawing CAD022 Rev A (see Appendix A). The depth of footings and minor ground levelling required for the buildings is c. 700mm from current ground levels. There is therefore an expected thickness

of made ground covering the archaeological level of average 1.57m. This data is in accordance with previous results at the Stepney Green archaeological investigations at the main shaft (see background information below at 2.4). A **general watching brief** shall be carried out by C261 on C305 excavations for the building footing trenches and drainage and during excavation of 4 No. trial pits to be excavated by C305 in advance of the main construction to assess ground conditions (see Appendix A). If this task shows that made ground covers the archaeology to a sufficient depth then no further GWB shall be required in the main construction phase

Two soak away pits are to be excavated to a greater depth (c. 2.6m BGL). This work is likely to encounter archaeological remains and therefore the pits shall be monitored by C261 under a **targeted watching brief**.

The location of the two soak away pits is set out on Sutcliffe Construction drawing C50 (see Appendix B).

2.4 General Watching brief – St Dunstons church I&M

A general watching brief will be undertaken of I&M monitoring in the former burial ground of St Dunstons churchyard (see Figure 4 in Appendix B). C122 propose the installation of monitoring equipment to monitor settlement induced by tunnelling on assets near the Crossrail tunnels. Of the total number, 116 hand augered levelling pins plus 5 extensometers boreholes and 3 inclinometers boreholes will be carried out within the boundary of the former burial ground.

The works will be carried out by C305. The levelling pins will be placed to 1.5m depth and have a diameter of 20cm. The boreholes will have a diameter of 15cm, to depth within the London clay.

C261 will be responsible for obtaining the necessary consents from the Ministry of Justice to allow for the works to go ahead under a watching brief of the borehole starter pits and levelling pins.

The starter pits will be hand dug. In the event of *in situ* remains being encountered C305 will stop works and Crossrail's Project Archaeologist notified. The methodology for dealing with Human Remains will then be applied (see annex 11 in WSI for further details). Hoarding or a form of screening from the public will need to be erected by C305.

During borehole works arisings shall be checked to observe whether human remains may be present. Should bone be located it will be reburied on site, within, or as close as possible to the location where it was uncovered. Should articulated human remains be discovered, a C261 osteology specialist will attend site. C261 shall undertake a toolbox talk for the C305 contractors on the nature of materials likely to be uncovered and the appropriate mitigation method. C261 will be on site to monitor the 8 boreholes, but will maintain a call out for any *in situ* remains located during levelling pin works and provide advice during reburial of spoil on-site.

The Principal Contractor is to be aware of the potential for locating human remains and to contact C261 in the event that human remains are located in the levelling pin locations.

The Principal Contractor is to ensure that spoil and arisings that result from starter pits, boreholes and other works, from the sub-soil environment in which burials may have been located will be re-buried on site. No spoil from these layers will be taken off site.

Spoil from these layers is to be stored safely on site and covered.

2.5 Background Information

For further detail relating to archaeological works carried out to date at Stepney Green Shaft, comprising a trial trench evaluation and full excavation, refer to the following C261 reports:



- C261 Fieldwork Report Archaeological Evaluation and Watching Briefs Stepney Green Shaft (XRW10): C261-MLA-X-RGN-CR140-50003.
- C261 Interim Statement Archaeological Excavation Stepney Green Shafts (XRV10): C261-MLA-X-GMS-CRG03-50002.

2.6 C261 reporting and archive

The above works shall be reported and archived in accordance with the main WSI under existing site code XRV10.

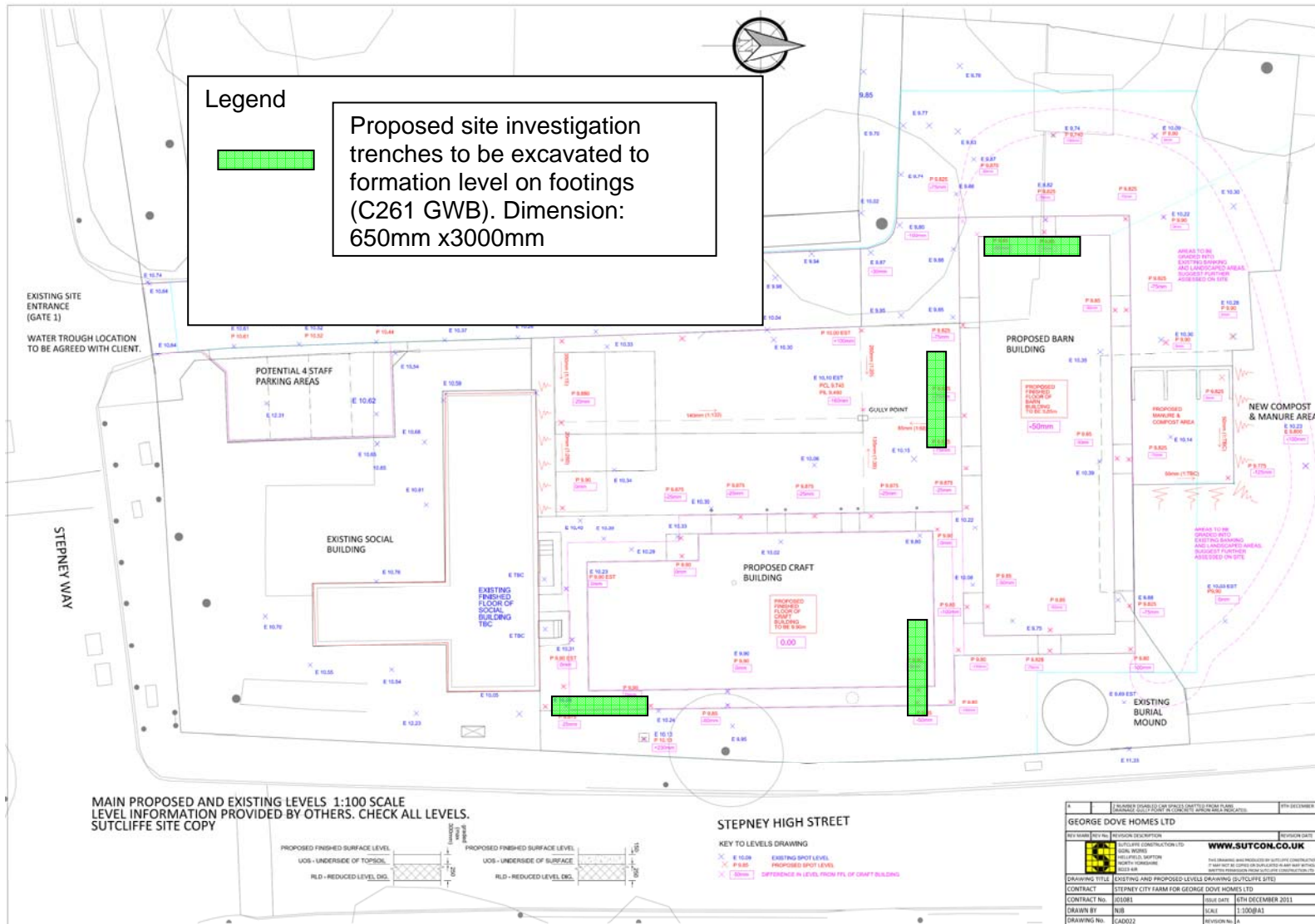
Appendix A

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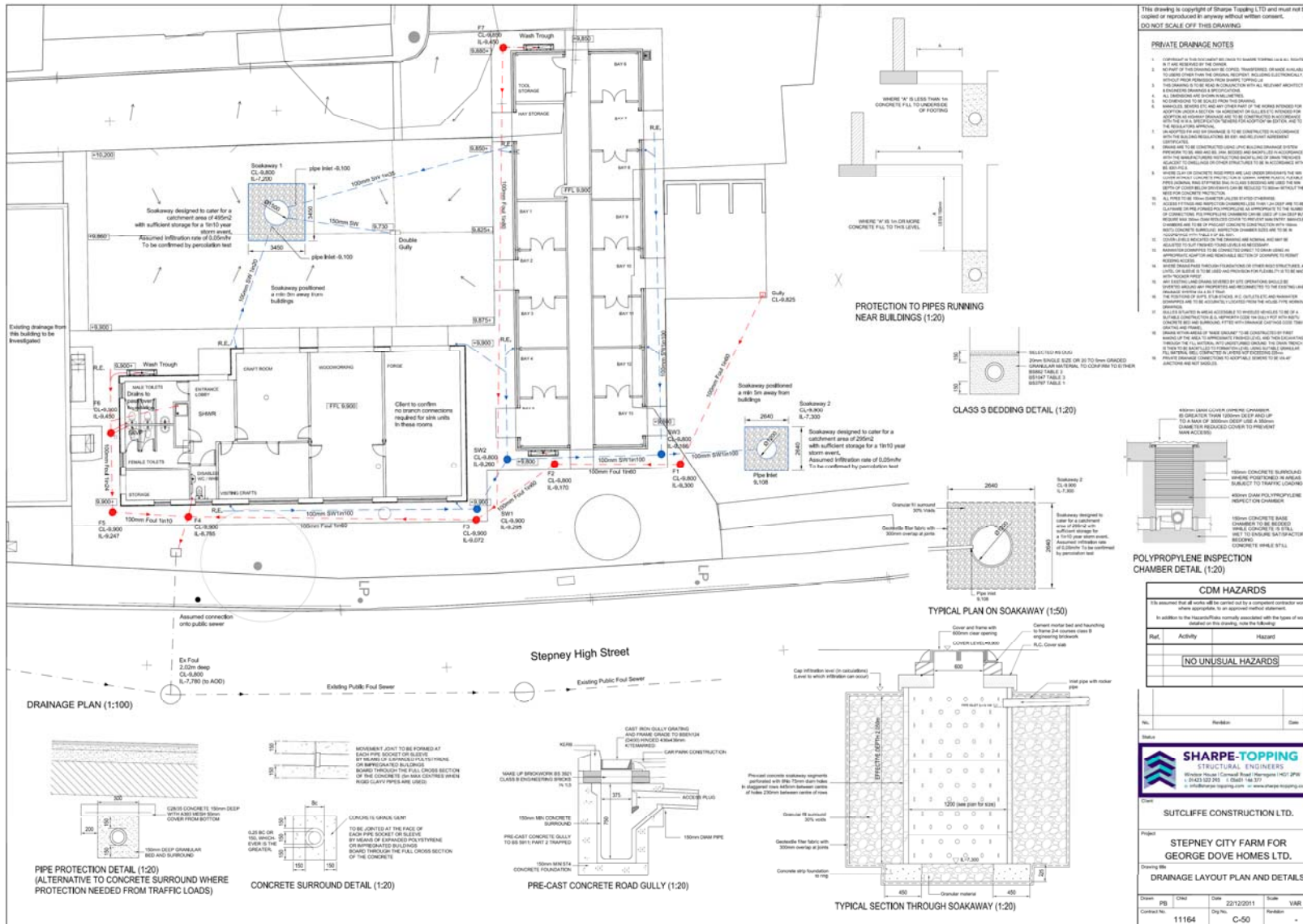
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Appendix B



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